

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/020372 A1

(51) International Patent Classification⁷: **H01Q 13/28**,
1/42

(21) International Application Number:
PCT/GB2004/003548

(22) International Filing Date: 18 August 2004 (18.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03255134.3 19 August 2003 (19.08.2003) EP

(71) Applicant (for all designated States except US): **ERA
PATENTS LIMITED** [GB/GB]; Cleeve Road, Leather-
head, Surrey KT22 7SA (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VAZQUEZ, Javier**

[GB/GB]; 34 Oakhill Court, Oakhill Road, Putney, Lon-
don SW15 2QH (GB). **PEARSON, Robert, A.** [GB/GB];
Chedworth, Tilford Road Rushmoor, Surrey, GU10 2ED
(GB).

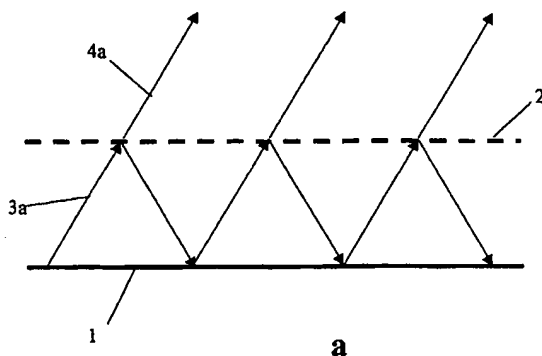
(74) Agent: **GILL JENNINGS & EVERY**; Broadgate House,
7 Eldon Street, London EC2M 7LH (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

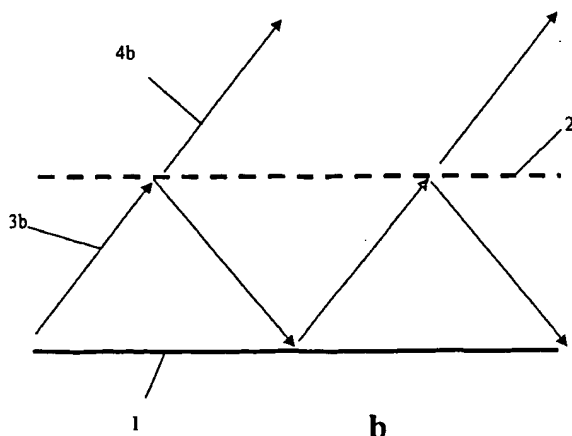
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: **RADIATION CONTROLLER INCLUDING REACTIVE ELEMENTS ON A DIELECTRIC SURFACE**



(57) Abstract: A device for controlling electromagnetic ra-
diation emitted by a structure is described. The device has a
reactive element comprising an array of conductors disposed
on a dielectric surface such that the displacement between a
conductor and any other conductor adjacent to it is small com-
pared to the wavelength of the electromagnetic radiation. As
such, the array of conductors represents an effectively contin-
uous conductive surface to the electromagnetic radiation and
the surface impedance of the conductive surface (2) is reac-
tive.





ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*